



Lightning Talk

Prepared for IARPA - REASON

Who We Are

Datyra is a consulting firm that helps clients achieve **strategic capabilities** with **advanced technology.**

IARPA REASON point of contact.

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Nathan Klarer

COO & Head of Machine Learning

Experienced AI leader with the following advanced natural language processing achievements; *Developed Transformers Deep Learning Nanodegree for Udacity, Architected Decision-Grade Strategic Insights Platform for Big 4 firm, Created Accelerated Computing Ontology Generation Platform Audionaut AI.*

Our Results

\$250 M

Est.
Value
Creation

4+

Years In
Business

40+

Engineers and Data
Scientists

AMERICAN
EXPRESS

Forbes

 SAN DIEGO RED.com

SAN DIEGO
BUSINESS
JOURNAL

Partners & Leadership Strategy



INCEPTION
PROGRAM

- **Nvidia Inception Program** - Early access to accelerated computing technologies
- **Udacity Deep Learning Nanodegree** - Designed course and technical materials
- **Channel Partners** - ScaleTech Consulting
- **Google Cloud** - Early technology access



TA1

TA1 - Identify Additional Evidence

Technical Skills:

- Word Vectorization (embeddings, fine-tuning)
- Machine Translation
- Named Entity Recognition
- Foundation Models

Production Deployments:

- Architected NLP sensing product across 100,000 data sources for Big 4 Firm



TA2

TA2 - Identify Strengths and Weaknesses

Technical Skills:

- Chain-of-Thought Prompting (baseline creation)
- Search Technologies
- Knowledge Graph Creation
- Ontology Design

Production Deployments:

- Productionized cluster computing ontological data representation system, Audionaut AI.



TA3 - Produce Recommendations to Increase Quality of Argumentation

Technical Skills:

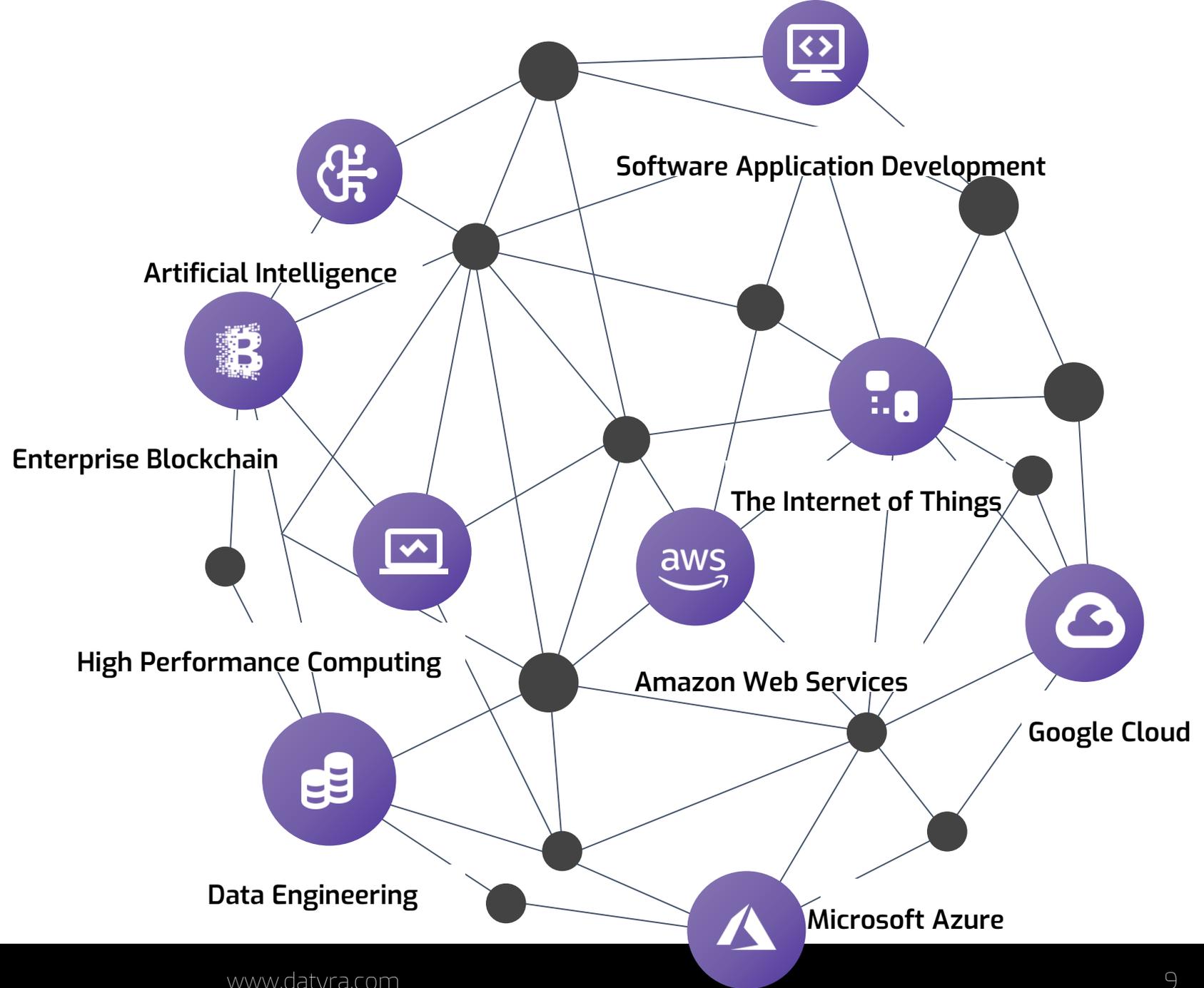
- Graph Neural Networks
- Recommender Systems
- CUDA Accelerated Computing

Production Deployments:

- Built large recommendations inference system for major University.



Full Capabilities



**We want to
connect with
researchers and
partners at
n@datyra.com!**